ACC NR: AP7010680   SOURCE CODE: PO/0046/66/011/07-/0555/0566

AUTHOR: Wajda, Stanislaw--Vayda, S.; Pruchnik, F.--Prukhnik, F.

ORG: Department of Inorganic Chemistry, Wroclaw University, Wroclaw
(Katedra chemii nieorganicznej uniwersytetu wroclawskiego)

TITLE: Isotopic exchange as a criterion of the structure of octahedral
/Me(CNS)$_6$/$^{n-}$ Complexes. II. Isotopic exchange in the system /Mo(NCS)$_6$/$^{3-}$-N^{14}CS$^-$

SOURCE: Nukleonika, v. 11, no. 7-8, 1966, 555-566

TOPIC TAGS: isotope, radioactive source, isotopic exchange, reaction
mechanism, molybdate

SUB CODE: 07,18

ABSTRACT: The exchange kinetics of radiocarbon in hexathiocyanatomolyb-
date (III) was examined. The exchange was found to proceed according
to the dissociation mechanism S$_{N1}$ after a certain induction period. On
the basis of these data the mechanism of isotopic exchange is given. The
magnitude of the activation energy (21.9 kcal/mole) suggests that the Mo-N
bonding is covalent but it is weaker than that in the chromium complex.
Orig. art. has: 9 figures and 7 tables. /Based on authors' Eng. Abst./
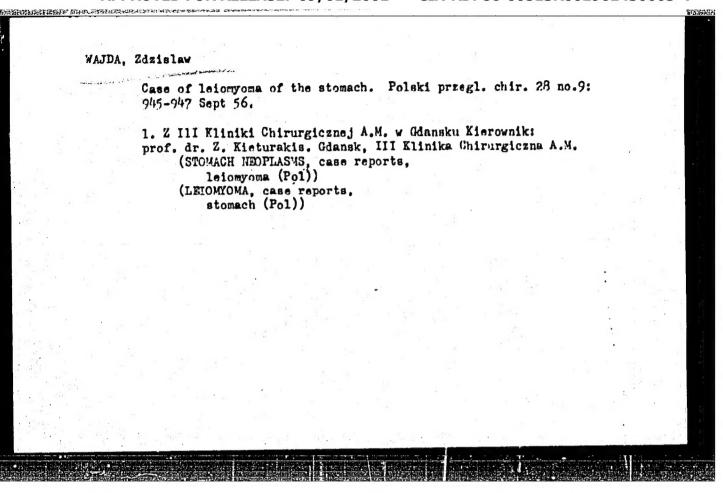/NW/

Card 1/1   0930   1869

TAUBENFLIEGEL, W.; WAJDA, Z.; LEWINSKI, A.

Determination of the condition of vascularization of pedicle
skin grafts (Gillies-Filatov) by the thermoelement. Acta chir.
plast. (Praha) 7 no.3:236-240 '65.

1. The 3rd Surgical Clinic, Medical Academy, Gdansk (Poland)
(Director: Prof. Zdzislaw Kieturakis M.D.).

WAJDA, Zdzislaw

Case of leiomyoma of the stomach. Polski przegl. chir. 28 no.9:
945-947 Sept 56.

1. Z III Kliniki Chirurgicznej A.M. w Gdansku Kierownik:
prof. dr. Z. Kieturakis. Gdansk, III Klinika Chirurgiczna A.M.
        (STOMACH NEOPLASMS, case reports,
            leiomyoma (Pol))
        (LEIOMYOMA, case reports,
            stomach (Pol))

WAJDA, 2.

STRZESZEWSKI, Jerzy; WAJDA, Zdzi...

Unusual complication following wearing truss. Polski przegl. chir. 29 no.7:721-722 July 57.

1. Z III. Kliniki Chirurgicznej A. M. w Gdansku. Kierownik: prof. Z. Kieturakis.
          (HERNIA, VENTRAL, therapy,
                truss, causing perf. of abdom. wall & prolapse of
                omentum (Pol))
          (ABDOMINAL WALL, perforation,
                caused by truss with prolapse of omentum (Pol))
          (OMENTUM, diseases,
                prolapse by truss, with abdom. wall perf. (Pol))

WERMUT, W.; SWICA, S.; WAJDA, Z.

Case of symptomatic hypertension cured by removal of hypoplastic
kidney. Polski tygod. lek. 13 no.42:1635-1638 20 Oct 58.

1. (Z II Kliniki Chorob Wewnetrznych A. M. w Gdansku; kierownik: Prof.
dr J. Penson i z III Kliniki Chirurgicznej A. M. w Gdansku; kierownik:
prof. dr Z. Kieturakis) adres: Gdansk, Panstw. Szpital Kliniczny II
Kliniki Chorob Wewnetrznych.
        (HYPERTENSION, case reports
              renal, cure by removal of hypoplastic kidney(Pol))
        (KIDNEYS, abnorm.
              hypoplasia causing hypertension, cure by nephrectomy (Po))

TAUBENFLIGEL, Wiktor, WAJDA, Zdzislaw, SMYK, Jerzy.

Experimental research on the suitability of free flaps from the peritoneum to supplement defects in the walls of the gastrointestinal system. Polski przegl.chir. 30 no.3:149-151 Mar '58

1. Z III Kliniki Chirurgicznej A.M.C. Kierownik: prof. dr Z. Kietruszis Gdansk, ul. Sluzby 9, III Klinika Chirurgiczna A.M.
(GASTROINTESTINAL SYSTEM, surg.
free peritoneal flaps to supplement defects in walls of gastrointestinal system in animals (Pol))
(PERITONEUM, surg.
same (Pol))

ZWYKIELSKI, Grzegorz; WAJDA, Zdzislaw

Tuberculosis of the spleen. Polski przegl. chir. 31 no.3:345-348 Mar 59.

1. Z III Kliniki Chirurgicznej A. M. Gdansku Kierownik: prof. dr Z. Kieturakis. Adres autora; Gdansk-Wrzeszcz, ul. Wajdeloty 10.
    (TUBERCULOSIS, case reports,
        spleen (Pol))
    (SPLEEN, dis.
        tuberc. (Pol))

SWICA, Stanislaw; WAJDA, Zdzislaw

A case of spontaneous gastric dilatation. Pol. tyg. lek. 17 no.17:
644-645 23 Ap '62.

1. Z III Kliniki Chirurgicznej AM w Gdansku; kierownik: prof. dr
Z. Kieturakis.

(STOMACH dis)

WAJDA, Zdzislaw; LEWICKI, Kazimierz

Spontaneous bleeding into the peritoneal cavity from the cystic artery. Pol. przegl. chir. 34 no.1:59-60 '62.

1. Z III Kliniki Chirurgicznej AM w Gdansku Kierownik: prof. dr Z Kieturakis.
(GALLBLADDER dis)   (HEMORRHAGE)

MIERZEJEWSKI, T.; MIRECKI, L.; PENSON, J.; SWICA, S.; WAJDA, Z.;
    WROZOLKOWA, T.

Pheochromocytoma. Diagnostic value of aorto-arteriography and
therapeutic problems. Kardiol. pol. 6 no.3:155-159 '63.

1. Z II Kliniki Chorob Wewnetrznych Kierownik: prof. dr J.
Penson z Kliniki Radiologii i Radioterapii Kierownik: prof.
dr W. Grabowski z III Kliniki Chirurgicznej Kierownik: prof. dr
Z. Kieturakis z Zakladu Anatomii Patologicznej AM w Gdansku
Kierownik: prof. dr W. Czarnocki.
            (PHEOCHROMOCYTOMA)   (ANGIOGRAPHY)

WAJDA, Zdzislaw; GOLYNSKI, Slawomir; WASOWSKI, Janusz

Treatment of duodenal fistulae with a pancreatic inhibitor
"trasylol". Pol. przegl. chir. 36 no.11:1367-1369 N '64

1. Z III Kliniki Chirurgicznej Akademii Medycznej w Gdansku
(Kierownik: prof. dr. Z. Kieturakis).

P/014/62/041/012/003/005
D204/D307

AUTHOR: Wajdała, Anna

TITLE: Stable urea-formaldehyde solutions

PERIODICAL: Przemysł Chemiczny, v. 41, no. 12, 1962, 688-689

TEXT: The present paper is a review aimed at presenting
the achievements attained in this field to Polish chemists, and
motivated by the scarcity of more detailed publications dealing with
this subject.   Compositions, storage temperatures, temperatures at
which the polymer is precipitated, stabilization and physical prop-
erties of urea-formaldehyde (u-f) solutions are summarized. 'Stable'
solutions are defined as those in which the concentration is high,
the stabilizing action being due to urea.   The methods of prepara-
tion are briefly described under the general headings of: (a) reac-
tion of solid urea with aqueous CH_2O, (b) absorption of gaseous
CH_2O in hot, concentrated solutions of urea, and (c) preparing a
hot concentrated CH_2O solution and mixing the latter with solid
urea.   The usual applications of u-f solutions are listed.   Produc-

Card 1/2

Stable urea-formaldehyde solutions   P/014/62/041/012/003/005
                                        D204/D307

tion and utilization of stable u-f solutions is recommended, in
view of the considerable savings in transportation and storage costs,
more efficient applications in the chemical industry and a saving
of methanol (70-120 kg MeOH/ton of formalin) which is at present
used to stabilize the solutions. Some Western-produced stable u-f
solutions and concentrates are characterized. Research into the
production and properties of stable u-f solutions has now been
started at ZA Kędzierzyn /Abstracter's note: Zakłady Azotowe (Ni-
trogen Works) Kędzierzyn_/. There are 14 references: 3 Soviet-bloc
and 11 non-Soviet-bloc.

ASSOCIATION: ZA Kędzierzyn

Card 2/2

Wajdeczko, A.

3. SURFACE DEFORMATION FROM THE WORKING OF A THICK COAL SEAM IN STRIPS, USING HYDRAULIC STOWING. Rozmanilez, E. and Wajdeczko, A. (Prace Glów. Inst. Górn. (Centr. chief Inst. Min., Stalinogród), Ser. A, 1955, Komunik. 171, 15pp.). A seam 8 m thick and 450 m deep was worked in strips 20-30 m wide with 20 m of coal left between them. An important building on the surface was undamaged. (L).

WAJDECZKO, A; MIELECKA, T.; IHNATOWICA, A.

Changes in some technological properties of coal under the influence of natural ventilation. p. 139

ARCHIWUM GORNICTWA. (Polska Akademia Nauk. Komitet Gornictwa) Warszawa, Poland. Vol. 4, no. 2, 1959

Monthly list of East European Accession (EEAI) LC, Vol. 9, no. 2, Feb. 1960

Uncl.

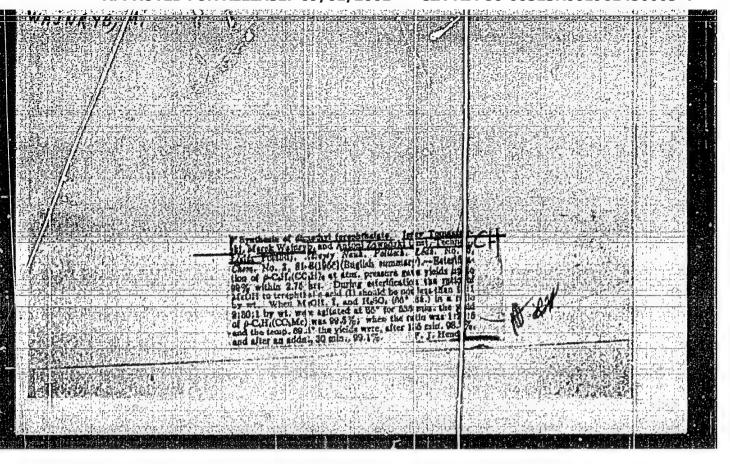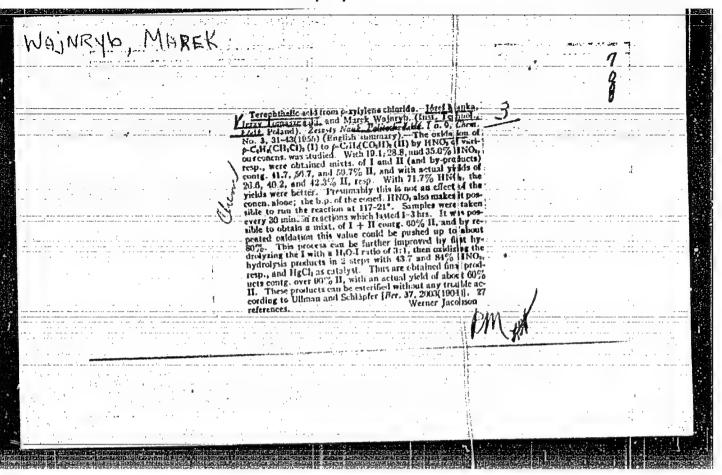TROJANOWSKI, Kazimierz, dr. inz.; WAJDECZKO, Augustyn, inz.; PYTLARZ,
        Tadeusz, mgr. inz.

    Development of ground deformation in time resulting from working
    a shallow seam. Przegl gorn 20 no.11:547-552 N '64.

WAJDOWICZ, A.

Effect of ultra-violet rays on the erythropoietic activity
of the kidney. Pol. biol. (Krakow) 13 no.3:317-321 '65.

1. Institute of General and Experimental Pathology, Medical
Academy, Krakow.

WAJDOWICZ, J., mgr

The network of pharmacies in the Rzeszow Voivodeship is
growing. Farmacja Pol 19 no.8:170 25 Ap '63.

WAJDOWICZ, J., mgr

Wlodzimierz Gardziel's 50 years of professional activities.
Farmacja Pol 19 no.3:66-67 10 F '63.

*

WAJDOWICZ, Jerzy, mgr

50 years of professional activities of Tadeusz Kruczek. Farmacja
Pol 18 no.24:603 30 D '62.

WAJDOWICZ, Z.

"Utilization of small streams for fish culture" p. 5 (GOSPODARKA RYBNA, Vol. 5, No. 3, Mar. 1953 Warszawa, Poland)

SO: Monthly list of East European Accessions, L.C., Vol. 3, No. 4, April 1954

WAJDOWICZ, Z.

Management of fishing in the Bcczalkowice water reservoir.   p. 504.
GOSPODARKA WORNA, Warszawa.   Vcl. 15, no. 12, Deo. 1955.

SOURCE: East European Accessions List (EEAL)   Library of Congress
          Vol. 5, no. 8, August 1956.

WAJDOWICZ, Z.

WAJDOWICZ, Z.   Workers of the Institute of the Biology of Ponds of the
Polish Academy of Sciences on a visit in Czechoslovakia.
p. 8. Vol. 8, no. 12, Dec. 1956. GOSPODARKA RYBNA.
Warszawa, Poland.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4-- April 1957

WAJDOWICZ, Z.

WAJDOWICZ, Z. The Gorzalkowice water reservoir as the site for fish culture;
stocking it with fry. p. 13. Principles of preparation of food mixtures for
fish. p. 15.

Vol. 7, no. 7, July 1955
GOSPODARKA RYBNA
AGRICULTURE
Poland

So: East European Accession, Vol. 6, No. 5, May 1957

WAJDOWICZ, Zbigniew, mgr., eng.

The Goczalkowice reservoir as an object of fish culture. III. Further development of the fish stock. Acta hydrobiol 3 no.4:225-239 '61.

1. Stacja Hydrobiologiczna, Zaklad Biologii Wod, Polska Akademia Nauk, Goczalkowice, powiat Pszczyna.

(Poland—Fish culture)

WAJDOWICZ Zbigniew, dr.

Development of ichthyofauna in dam reservoirs with small va-
riations in the water level. Acta hydrobiol 6 no.1:61-79 '64

1. Zaklad Biologii Wod, Polska Akademia Nauk, Krakow.

WAJDZIK, C.

WAJDZIK, C.   Usefulness of fissured walls in buildings in the light of more
                experiments. (To be contd.) p. 17. Vol. 8, no. 10, Oct. 1956.
                BUDOWNICTWO WIEJSKIE. Warszawa, Poland.

WAJDZIK, C.

WAJDZIK, C.   Humidity is the chief defect of fissured walls. II(to be contd.) p. 13

Vol 8, no. 11, Nov. 1956
BUDOWNICTWO WIEJSKIE
AGRICULTURE
Warszawa, Poland

So: East European Accession vol 6, no. 3, March 1957

WAJDZIK, C.

WAJDZIK, C.   Usefulness of fissured walls in buildings in the light of more
recent experiments. III.(Conclusion) p. 17. Vol. 8, no. 12,
Dec. 1956. BUDOWNICTWO WIEJSKIE. Warszawa, Poland.

WAJDZIK, C.

The amount of surface condensation in farm buildings. p. 4.

BUDOWNICTWO WIEJSKIE. (Ministerswo Rolnictwa i Ministerstwo Panstwowych Gospodarstw Rolnych) Warsawa, Poland. Vol. 11, no. 10, Oct. 1959

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960

Uncl.

WAJNGOT. F.

"Criticism Improves our Publication," P. 227. (PRZEMYSL CHEMICZNY, Vol. 10 No. 5, May 1954. Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955 Uncl.

WAJINGOT, F.

"Conference of Readers and Contributors to Chemical Periodicals," P. 194.
(PRZEGLAD TECHNICZNY, Vol. 75, No. 5, May 1954. Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,
No. 1, Jan. 1955 Uncl.

WANRYB, M.

3 /

Polyamide resins. Marian Wajnryb. Przemysl Chem.
27, 691 (1948). The chemistry, general character-
istics and properties of the polyamide resins are reviewed
Frank Gentel

Synthesis of diaryl terephthalate. Jerzy Tomasik, Marek Walczyk, and Antoni Zawadzki (Inst. Technol. Zakł. Pol...), Przemy Nauk. Polska. Zak. No. 0; Chem. No. 2, 81-8(1961)(English summary).—Esterification of p-$C_6H_4(CO_2H)_2$ at atm. pressure gave yields up to 99% within 2.75 hrs. During esterification the ratio of MeOH to terephthalic acid (I) should be not less than 1:1 by wt. When MeOH, I, and H_2SO_4 (86° 84.) in a ratio 2:80:1 by wt. was agitated at 66° for 555 min, the yield of p-$C_6H_4(CO_2Me)_2$ was 99.5%; when the ratio was 1:80:15 and the temp. 69.1° the yields were, after 110 min. 98.7%, and after an addn. 30 min., 99.1%.   P. L. Heng

WAJNRYB, MAREK

Terephthalic acid from p-xylylene chloride. József Manka, Jerzy Tumasiewicz, and Marek Wajnryb. (Inst. Technol. Ciezk. Poland). *Zeszyty Nauk. Politech. Łódz.* I o. 9, *Chem.* No. 3, 31–43(1956) (English summary).—The oxidation of p-C$_6$H$_4$(CH$_2$Cl)$_2$ (I) to p-C$_6$H$_4$(CO$_2$H)$_2$ (II) by HNO$_3$ of various concns. was studied. With 19.1, 28.8, and 35.0% HNO$_3$, resp., were obtained mixts. of I and II (and by-products) contg. 41.7, 56.7, and 59.7% II, and with actual yields of 20.6, 40.2, and 42.3% II, resp. With 71.7% HNO$_3$, the yields were better. Presumably this is not an effect of the concn. alone; the b.p. of the concd. HNO$_3$ also makes it possible to run the reaction at 117–21°. Samples were taken every 30 min. in reactions which lasted 1–3 hrs. It was possible to obtain a mixt. of I + II contg. 60% II, and by repeated oxidation this value could be pushed up to about 80%. This process can be further improved by first hydrolyzing the I with a H$_2$O-I ratio of 3:1, then oxidizing the hydrolysis products in 2 steps with 43.7 and 84% HNO$_3$, resp., and HgCl$_2$ as catalyst. Thus are obtained final products contg. over 90% II, with an actual yield of about 60% II. These products can be esterified without any trouble according to Ullman and Schläpfer [*Ber.* 37, 2003(1904)]. 27 references.

Werner Jacobson

WAJNRYB, M.; MOLINSKI, S.

"Synthetic products in medicine and biology."

p. 35 (Chemik) Vol. 10, no. 2, Feb. 1957
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 4,
    April 1958

WAJNRYB M.

Poland /Chemical Technology. Chemical Products   I-25
         and Their Application

         Synthetic polymers. Plastics.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32459

Author : Wajnryb M.

Title   : Polyethylene

Orig Pub: Przem. chem., 1956, 12, No 4, 195-199

Abstract: Description of the methods of production of
          polyethylene by polymerization of ethylene at
          high and low pressure, of the physico-mechanical
          properties and dielectric characteristics, and
          of the scope of utilization of polyethylene.
          Bibliography 6 references.

Card 1/1

S/081/62/000/005/097/112
B166/B101

AUTHORS: Brzeziński, Jan, Wajnryb, Marek

TITLE: Fractional precipitation of polycarbonates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 606, abstract
5P14 (Tworzywa. Guma. Lakiery, v. 5, no. 11-12, 1960,
326-334, 383)

TEXT: A short description is given of the theory and principles of
fractional precipitation of polymers. A technique and apparatus have been
developed for a rapid method of fractional precipitation of polycarbonates
under the following conditions: quantity of polymer 1 g, fractionating
temperature 20°C, solvent - chloroform, precipitator - petroleum ether
with a boiling point of 30-50°C, initial polymer concentration 0.5 % by
volume, fractionating time 6-7 hrs. The molecular weight was determined
by viscometry in chloroform at 25°C. On the basis of the experimental
data the relationship between the molecular weight and the viscosity of

Card 1/2

Fractional precipitation of ...

S/081/62/000/005/097/112
B166/B101

solutions of polycarbonates in chloroform at 25°C was defined. The article gives the molecular composition of commercial grades of polycarbonates intended for the production of film and for treatment by the injection molding process. [Abstracter's note: Complete translation.]

Card 2/2

s/081/62/000/003/087/090
B159/B101

AUTHOR: Wajnryb, Marek

TITLE: The stereoregular structure of polymers

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 3, 1962, 635, abstract
              3R2 (Tworzywa wielkoczasteczkowe, v. 6, no. 5, 1961, 144-149)

TEXT: The features of the atactic, isotactic and syndiotactic structures
of high polymers, the specific properties of stereoconstant polymers,
and crystallinity are examined. The influence of the symmetry of
molecules and of lateral substitutions on the degree of crystallinity
is discussed in part. 9 references. [Abstracter's note: Complete
translation.]

Card 1/1

WAJNRYB, Marek; RASZCZUK, Alina

Methods of evaluation of the thixotropic properties of polyester resins.
Polimery tworzywa wieloczast 7 no.2:59-64 F '62

1. Instytut Tworzyw Sztucznych, Warszawa.

ZIELIŃSKA, Daniela; ROSZKOWSKI, Zbigniew; WAJNRYB, Marek

    Alkyl benzene as a diluent for polyvinyl chloride blends.
Polimery tworz wielk 7 no.7/8:249-251 Jl-Ag '62.

    1. Instytut Tworzyw Sztucznych, Warszawa.

KROZER, Szymon; WAJNRYB, Marek

Studies on the thermomechanical properties of low- and high-
pressure polyethylene mixtures. Polimery tworz wielk 7 no.10:
367-372 O '62.

1. Instytut Tworzyw Sztucznych, Warszawa.

MAJEWSKA, F.; WAJNRYB, M.

Analyzing methods of commercial types of polyamides. Polimery
tworz wielk 8 no.2:63-65 F '63.

SOBICZEWSKI, Zbigniew; WAJNRYB, Marek

Density measurements of polymers in gardient tubes. Polimery
tworz wielk 8 no.2:69-72 F '63.

1. Instytut Tworzyw Sztucznych, Warszawa.

P/014/62/041/012/002/005
D204/D307

AUTHOR: Wajnryb, Marek

TITLE: The stabilization of polyvinyl chloride. Part I

PERIODICAL: Przemysł Chemiczny, v. 41, no. 12, 1962, 681-684

TEXT: The present article is a review dealing with the
causes of the sensitivity of PVC to the combined action of light
and air, and to the effects of elevated temperature, even in the
absence of air and light. The modern views concerning the structure
of PVC and the mechanism of thermal decomposition are given. The
lack of stability is due to the existence of weak spots on the macro-
structure, such as double bonds, points of branching, and to remnants
of initiator. In the absence of air the decomposition proceeds by
an ionic mechanism and is made possible by the initial loss of HCl
and the resultant formation of conjugated double bonds, which then
permit cross-linking. In the presence of air the decomposition is
accelerated and both cross-linking and oxidative degradation take
place, by a free-radical process. The decomposition may also be

Card 1/2

The stabilization of polyvinyl ...   P/014/62/041/012/002/005
                                       D204/D307

initiated by irradiation with light. The purpose of stabilizers is
described in general terms. There are 3 figures and 12 non-Soviet-
bloc references.

ASSOCIATION: Instytut Tworzyw Sztucznych w Warszawie (Institute
                Of Synthetic Resins, Warsaw)

Card 2/2

WAJNRYB, M.

Conference of the Technical Committee of the International Organiza-
tion for Standardization, 1961. Przem chem 41 no.12:732-733 D
'62.

P/014/63/042/001/002/004
D204/D307

AUTHOR: Wajnryb, Marek

TITLE: Stabilization of polyvinyl chloride. II. Stabil-
                 izers

PERIODICAL: Przemysł Chemiczny, v. 42, no. 1, 1963, 16-19

TEXT: The present article is a review based wholly on
Western work over the period 1939-1960. Substances preventing the
undesirable side-effects of the thermal decomposition of PVC are dis-
cussed under the headings of (a) inorganic and organic salts of lead,
(b) organic salts of Cd, Ba, Ca, and Zn, and (c) organic compounds of
tin. Attention is focussed on the probable mechanisms, the relative
effectiveness, and on the specific properties of the polymer which
are stabilized with a given compound. A brief description is also
given of organic stabilizers; chiefly anti-oxidants, which are added
to the polymer in conjunction with other stabilizing substances.
The problem of light-stabilization is indicated. It is concluded
that every variety of PVC requires a different mixture of stabilizers.

Card 1/2

Stabilization of polyvinyl chloride P/014/63/042/001/002/004
D204/D307

and the importance of (1) thorough distribution of stabilizer through-
out the mass of PVC, and (2) prevention of adhesion of PVC to hot sur-
faces by adding lubricants, is underlined. Thermal decomposition of
the polymer is hindered only by on stabilizers, whilst the other sub-
stances discussed preserve only the color of the polymer. It is con-
sidered that stabilization by the addition of free radical acceptors
is not yet fully explored. There are 9 figures and 12 non-Soviet-
bloc references.

ASSOCIATION: Instytut Tworzyw Sztucznych w Warszawie (Institute
                  of Plastics, Warsaw)

Card 2/2

WAJNTRAUB, J.

Method of defining the chemical damage to wool during the process of scouring.
Biuletyn Wlok. p. 12. (PRZEMYSL WLOKIENNICZY, Lodz, Vol. 7, no. 7/8, July/Aug. 1953.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955,
Uncl.

WAJNRAUB, I.

POL.

2472
Jakobson L. Wajnraub J. Non-Crease Finishes for Synthetic Cellulose Fibre Fabrics.
"Apretury przeciwko gnieceniu dla tkanin ze sztucznych włókien cetulozowych". Przemysł Włókienniczy. No. 9—10, 1953, pp. 223—231.

5 tabs.

The authors have compiled a formula for urea-formaldehyde condensate intended for use as a non-crease impregnating medium for synthetic cellulose fibre fabrics. The impregnating bath used for this purpose contains, in addition to the condensate, a softening medium — Tefobol IW — and crystalline sodium acetate. Ammonium phosphate and formic acid are used as catalyst. Saturation of the fabric is carried out in padding machines at a temperature of the impregnating bath of 35°C. The fabric is, after squeezing, dried in a temperature of roughly 70°C. Further treatment consists in raising the temperature of the fabric, in a superheating apparatus, for from 3½ to 5 minutes, to approx. 140°C. Any non-condensed resins and acid catalyst still remaining in the fabric is removed by washing with soap and soda.

Shortened   reaction after pre-treatment with chlorine.

tensile strength   elasticity   and capillary absorbents

dvely than enzymatic specifics. Jujully concess in in
degree of whitness, and fleece —

WAJNTRAUB, J.

Elaboration of the condition of bleaching the fabric made of mixtures of cotton-cut viscose fiber. Biuletyn Wlok.

p. 21
Vol. 9, no. 6, Aug. 1955
PRZEMYSL WLOKIENNICZY
Lodz

SO: Monthly List of East European Accessions (EEAL), LC,Vol. 5, no. 3
March 1956

WAJS, K.

WAJS, K. Determination of essential parameters of drive of hoisting machines.
    p. 440

Vol. 31, No. 7, July 1955
PRZEGLAD ELEKTROTECHNICZNY
TECHNOLOGY
Poland

So: East Europeon Accession, Vol. 5, No. 5, May 1956

MAJS, K.

Regulators in automatized systems. p.106
WIADOMOSCI ELEKTROTECHNICZNE. (Stowarzyszenie Elektrykow Polskich, Centralny Zarzad Energetyki, Centralny Zarzad Przemyslu Maszyn Elektrycznych, Centralny Zarzad Przemyslu Kablowego) Warszawa
Vol. 6, No. 5, May 1956

So. East European Accessions List   Vol. 5, No. 9   September 1956

WAJS, K.

Reversible clutching in automatized systems. p. 204.
(WIADOMOSCI ELEKTROTECHNICZNE. Vol. 16, no. 9, Sept. 1956, Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957.
Uncl.

WAJS, K.

"Evaluation of the quality of operation of automatized systems."

p. 223 (Wiadomosci Elektrotechniczne) Vol. 17, no. 9, Sept. 1957
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

WAJS, K.

Direct and indirect regulators.

P. 56 (WIADOMOSCI ELEKTROTECHNICZNE) (Warszawa, Poland) Vol. 17, no. 3, Mar. 1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958

WAJS, K.

Something new from the field of drives in hoisting machinery.   p. 57

WIADOMOSCI ELEKTROTECHNICZNE.   (Stowarzyszenie Elektrykow Polskich, Centralny
Zarzad Energetyki, Centralny Zarzad Przemyslu Maszyn Elektrycznych i Centralny
Zarzad Przemyslu Kablowego) Warszawa, Poland. Vol.19, no.3, Mar. 1959

Monthly List of East European Accessions Index, (EEAI) LC, Vol.8, no.6
June 1959
Uncl.

WAJS, Karol, mgr inz.

Drive of eccentric presses. Wiad elektrotechn 19 no.7:218-220 Jl
'59.

82059

P/024/60/000/07/01/001

21.1000

AUTHOR: Wajs, Karol, Master of Engineering

TITLE: Control and Regulation of Research Reactors /9

PERIODICAL: Wiadomości Elektrotechniczne, 1960, No 7, pp 189 - 192

TEXT: The author presents an outline description of control and reg-
ulation in thermal neutron research reactors as distinguished from power
reactors. The article is limited to a descriptive presentation, while phys-
ics and safety are omitted. (Reference is made to an article in Wiadomości
Elektrotechniczne, 1960, No 3, pp 66 - 68, for the basic description of
thermal reactors.) The first chapter of the article deals with the prin-
ciples of reactor control; the definitions of neutron density and multi-
plication constant are explained, as well as the four factors which inter-
fere with the operational stability of a reactor: a) fuel burn-up, b) in-
troduction and withdrawal of test instruments, test samples etc., c) tem-
perature variations and d) reactor poisoning. The formation and effect of
Xe^{135} as a reactor poison is briefly explained. Further on, the methods
of influencing reactivity are mentioned: control of neutron escape by
means of a reflector and neutron absorption by means of a control rod.   LH

Card 1/2

Control and Regulation of Research Reactors   P/024/60/000/07/01/001

The second chapter deals with the reactor control system. Pointing out
that on principle neutron density is controlled, the author mentions the
two means of measuring neutron density, i.e. counters and ionization cham-
bers, and he lists the difficulties encountered in such measurement: a)
wide range required, b) external disturbances, c) irregular distribution
of neutron density. Further on, the amplification, conversion and com-
parator stages are mentioned and briefly explained. At the close of the
article, the author lists the functions of control rods, which are emer-
gency scram, control of the rate of reaction and compensation of disturb-
ances such as fuel burn-up, poisoning etc. There is 1 Figure.

Card 2/2

27318
P/046/60/005/011/007/018
D249/D303

26.2222

AUTHOR: Wajs, Karol

TITLE: The error estimation of linearized nuclear reactor
            equations

PERIODICAL: Nukleonika, v. 5, no. 11, 1960, 737 - 742

TEXT: In solving the problem of kinetics of a nuclear reactor by
direct analytical methods, one usually substitutes for the general
system of differential equations, a system of differential equa-
tions with constant coefficients. Errors of this approximation were
estimated by the author. A system of kinetic equations was assumed
in a form given by M.A. Schultz (Ref. 1: Control of Nuclear Reac-
tors and Power Plants. Chap. 3: Reactor Kinetics, New York 1955,
Mc Graw Hill Book Comp.) and this was linearized by inserting for
the neutron density function n (t) its initial value n(0). As a
result of this operation the coefficients become constant, and the
problem can be solved in terms of n(t) for a given initial reacti-

Card 1/4

27318
P/046/60/005/011/007/018
D249/D303

The error estimation of ...

vity. In order to estimate the deviation of the linearized system
from the original one, the general shape of the equations was in-
vestigated in terms of the theory of differential inequations by
applying a theorem given by T. Ważewski (Ref. 2: Système des équa-
tions et des inégalités différentielles ordinaires aux deuxième
membres monotones et leurs applications. Annales de la Soc. Pol.
de Mth. t. 23, 1950, pp 112-166). The errors were considered se-
parately for two cases: positive initial reactivity and negative
initial reactivity [Abstractor's note: $k(t) < 0$ appears in text
erroneously as " $k(t) > 0$], and the final result for both cases is
presented by a single expression:

$$/n_1(t) - n_2(t)/ < \frac{n_{extr} - n(0)}{\tau} \int_0^t \delta k(t) \, dt \qquad (4)$$

where $n_1(t)$ and $n_2(t)$ are neutron densities given respectively by
the exact system of equations and the approximate one, and n_{extr}

Card 2/4

27318
P/046/60/005/011/007/018
D249/D303

The error estimation of ...

is the extremum value of the function n(t) measured against the initial value n(0). For practical calculations a specified time-dependence of the reactivity has to be assumed; e.g. if the reactivity jumps to a value $\delta k(t) = k_0$, the expression for the error

reduces to:

$$/n_1(t) - n_2(t)/ < \frac{k_0 t}{\tau} [n_{extr} - n(0)]$$

the constant of integration being eliminated by the initial condition: $n_1(0) = n_2(0) = n(0)$. It is stated that the evaluated error is safely larger than an exact estimate due to the fact that the delayed neutrons were neglected, and the effect of including the delayed neutrons is discussed. In conclusion, results of a simplified numerical calculation are presented for the extreme case of a very small reactivity. There is 1 figure and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: M.A. Schultz, Control of nu-

Card 3/4

27318
P/046/60/005/011/007/018
D249/D303

The error estimation of ...

clear reactors and power plants, McGraw Hill, New York, 1955,
Chap. 3.

ASSOCIATION: Instytut elektrotechniki, Warszawa (Electro-Technical
Institute, Warsaw)

SUBMITTED: September, 1960

Card 4/4

WAJS, Karol, mgr., inz.

Increase of the probability of a steady state by regulation.
Pomiary 7 no.10:420-422 O '61.

(Automatic control)

WAJS, Karol, Mgr. Inz.

Rotor emergency breaking in an electric motor. Inst Elektrotech
9 no.26:69-80 '61.

1. Zaklad Konstrukcji Urzadzen i Maszyn Elektrycznych, Warszawa.

WAJS, K.

"Introduction to matrices applied in electronics" by A. Weiss.
Reviewed by Wajs, K. Przegl elektrotechn 37 no.11:469-470 '61.

WAJS, Karol, mgr inz.

Integral criteria of the operational quality of a feedback control
system as topological problem. Inst elektrotech prace 10 no.29:
89-96 '62.

1. Osrodek Dokumentacji i Informacji Naukowej, Warszawa.

P/530/62/010/030/001/001
D201/D308

AUTHOR: Waja, Karol, Master of Engineering

TITLE: Phase plane linearization of control elements

SOURCE: Warsaw, Instytut Elektrotechniki, Prace, v.10, no.
             30, 1962, 47-57

TEXT: The author shows that when the non-linear component
of a feedback control system is described by a differential equation
of the second order, it may be replaced by a linear first or second
order element, the transfer function of which is determined from the
analysis of phase trajectory. With small deviations from the state
of equilibrium the phase trajectories can be approximated by piece-
wise exponentials which may be called a variation of the Euler method
of approximate solution of differential equations. When the changes
of the independent variable are considerable, the harmonic approxima-
tion may be used; the latter may be considered as a certain interpret-
ation of the Fourier series the constant term of which determines the

Card 1/2

P/530/62/010/030/001/001
D201/D308

Phase plane linearization ...

locus shift along the abscissa and the harmonic terms differ only in their origin. In practice, the harmonic approach is restricted to two cases only: when the equilibrium is on the abscissa itself and when instants of time have to be calculated for regions near to the abscissa. There are 6 figures.

ASSOCIATION: Zakład Dokumentacji i Informacji Naukowej (Department of Scientific Documentation and Information)

SUBMITTED: February 22, 1962

Card 2/2

WAJS, Karol, mgr inz.

Higher order control system components in the phase plane.
Inst elektrotech prace 10 no.31:45-54 '62.

1. Osrodek Dokumentacji i Informacji, Instytut Elektrotechniki,
Warszawa.

WAJS, K.

"Practical mathematics for engineers" by R. Zurmuhl. Reviewed by K. Wajs. Przegl elektrotechn 38 no.2:72 '62.

WAJS, K.

    Statistical theory of communication by Lee, Y.W. Reviewed by K. Wajs.
    Przegl elektretechn 38 no.3:123- , Mr '62.

WAJS, Karol, mgr., inz.

Basic notions of the signal theory. Przegl elektrotechn
38 no.4:143-148 Ap '62.

WAJS, Karol, mgr inz.

       Courses of self excitation of shunt generators.
       Przegl elektrotechn 38 no.9:374-378 S '62.

       1. Instytut Elektrotechniki, Warszawa.

WAJS, K.

"Analysis of nonlinear systems" by N.I.Cunningham. Reviewed by
K.Wajs. Przegl elektrotechn 39 no.1:38-39 Ja '63.

WAJS, K.

"A methodology for systems engineering" by A.D.Hall. Reviewed
by K. Wajs. Przegl elektrotechn 39 no.11:446-447 N '63.

WAJS, K.

"Measurement: definitions and theories," edited by C.W.
Churchman, Ph. Ratoosh. Reviewed by K. Wajs. Przegl
elektrotechn 40 no.1:62-63 Ja'64.

WAJS, Karol

       Archangielski's driving system. Przegl. elektrotechn 40 no.6:
274-279 Je '64

       1. Editor, "Przeglad Elektrotechniczny", Warsaw.

MAJ, Karol, mgr inz.

Control systems of equal value. Inst elektrotech prace 11
no.33:21-42 '63

1. Osrodek Dokumentacji i Informacji Naukowej, Instytut
Elektrotechniki, Warszawa.

WAJS, K.; ZEYDLER-ZBOROWSKI, Jan, mgr ins.; LADZINSKI, Radoslav, doc. dr

Review of technical publications. Przegl elektrotechn 40 no.12: 517-518 D '64.

L 24353-65   EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1)   Pf-4

ACCESSION NR: AP5001175   P/0034/64/000/012/0530/0532

AUTHOR: Wajs, K. (Doctor)

TITLE: Determination of time constants from time characteristics

SOURCE: Pomiary, automatyka, kontrola, no. 12, 1964, 530-532

TOPIC TAGS: automation, automatic control system, control system parameter, time constant, proportional element, integrating element, differentiating element, control system performance

ABSTRACT: This paper presents a method for determining the numerical values of the coefficients which appear in the operator functions of proportional, integrating and differentiating elements of control systems. The method is based on the integral values of the weighted criteria of performance quality which can be determined when the time characteristic (defined as the response to a unit step function) of the given element is known. The time characteristic is a source of information on such elements and, since it is readily determined, many attempts are made to find methods for determining the values of such coefficients - which play the part of time constants- from the shape of the time characteristic. Usually, these methods are time-consuming. The method developed in the present paper is

Card   1/3

L 24353-65

ACCESSION NR: AP5001175

simpler, fully rigorous, and based on the various weighted integral criteria of performance quality of a control system. The weighted integral criterion of performance quality is assumed in the form

$$\int_{c} t^{n} \cdot \mathcal{E}(t)\, dt \quad n = 0,1,2,3 \ldots$$

where $\mathcal{E}(t)$ is the difference between the steady-state output of the element and the instantaneous value of the output. The evaluation of this integral is a simple matter when the time characteristic is available. Each of the above integrals, corresponding to different n, can be expressed as a combination - usually a simple one - of the various time constants. The method is developed for proportional, integrating and differentiating elements. The values of the integral criteria for n = 0,1,2 and 3 weighted for these elements, expressed in terms of the time constants which appear in the operator transfer function of the element, are tabulated. The method is particularly convenient for proportional elements but can still be used with advantage for the other two types of elements. However, the formulas obtained become complicated as n increases, and for elements corresponding to n greater than 4, the method becomes impractical. Orig. art. has: 16 formulas, 1 figure and 3 tables.

Card 2/3

L-24353-65

ACCESSION NR: AP5001175

ASSOCIATION: Instytut elektrotechniki (Electrical engineering institute)

SUBMITTED: 00   ENCL: 00   SUB CODE: IE, MA

NO REF SOV: 000   OTHER: 000

Cord 3/3

BIALKIEWICZ, Zbigniew, mgr inz.; SCISLOWSKI, Wlodzimierz, prof, dr; BIERNACKI,
Tomasz; WAJS, K.

Review of technical publications. Przegl elektrotechn 41 no.2:
73-75 F '65.

WAJS, K.

Reviews of technical books. Przegl elektrotechn 41 no.4:153-154 Ap '65.

KONORSKI, Boleslav, prof. dr inz.; WAJS, K.

Publications on engineering. Przegl eléktrotechn 41 no.3:105-108 Mr '65.

WAJS, M.

Development of the wage policy in the machine manufacturing industry in Poland.
p.307.
MECHANIK (Stowarzyszenie Inzynierow i Technikow Mechanikow Polskich) Warszawa
Vol. 28, no. 8, Aug. 1955

So. East European Accessions List   Vol. 5, No. 9   September 1956

GRABOWSKI, Aleksander; WAJS, Symcha ·

Laboratory procedures for making working models by multipli-
cation method. Czas. stomat. 18 no.10:1231-1235 O '65.

1. Z Kliniki Protetyki Stomatologicznej AM w Warszawie
(Kierownik: prof. dr. J. Galasinska-landsbergerowa).

WAJS, Stanislaw

On economy and management in fuels and power production. Wiad naft 8 no.6:121-123 Je '62.

1. Posel na Sejm, Warszawa.

WAJS, Z.

The Polish textile machinery industry. p. 220.

PRZEGLAD MECHANICZNY. (Stowarzyszenie Inzynierow i Technikow Mechanikow Polskich) Warszawa. Poland. Vol. 17, no. 5, May 1958.
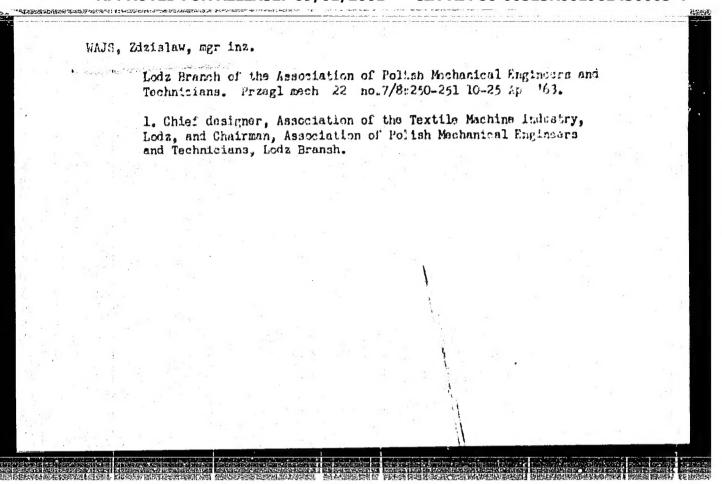
Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1959.

Uncla.

WAJS,Z.

Current factors influencing the construction of textile machinery, p.333.

PRZEGLAD WLOKIENNICZY. (Stowary szenie Inzynierow i Technikow Przemyslu
Wlokienniczego) Loda, Poland, Vol. 13, No. 7, July 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1959.

Uncl.

WAJS, Zdzislaw, mgr inz.

   Lodz Branch of the Association of Polish Mechanical Engineers and
   Technicians. Przagl mech 22 no.7/8:250-251 10-25 Ap '63.

   1. Chief designer, Association of the Textile Machine Industry,
   Lodz, and Chairman, Association of Polish Mechanical Engineers
   and Technicians, Lodz Branch.

MOYCHO, W.; GUBANSKI, M.; FOMAIDIS, B.; LIMANSKA, M.; WAJSBARD, E.

The occurrence of tobacco mosaic virus in tomatoes in Lodz and its
neighborhood. Postepy nauk roln 7 no.1:79-82 Ja/F '60. (EEAI 9:10)
(Poland--Tomatoes)
(Mosaic disease)
(Viruses)

KICZAK, Janina; SEBASTYANSKI, Tadeusz; SAGAN, Zygmunt; WAJSKOL, Adela

Acquired hemolytic anemia in a patient with malignant granuloma.
Polski tygod. lek. 15 no.46:1772-1776 14 N '60.

1. Z II Kliniki Chorob Wewnetrznych P.A.M. w Szczecinie; kierownik:
pref. dr Edward Gorskowski.

(HODGKIN'S DISEASE compl)   (ANEMIA HEMOLYTIC compl)

WAJSKOL, Aron (Szczecin, al. Powstancow 72 II Kl. Chir. Pom. Ak. Med.)

Body potassium metabolism & its importance in the surgical clinic.
Polski tygod. lek. 14 no.10:446-448 9 Mar 59.

1. (Z II Kliniki Chirurgicznej P.A.M. w Szczecinie; kierownik: doc.
dr W. R. Heftman).
        (POTASSIUM, metab.
              disord., significance in surg. (Pol))